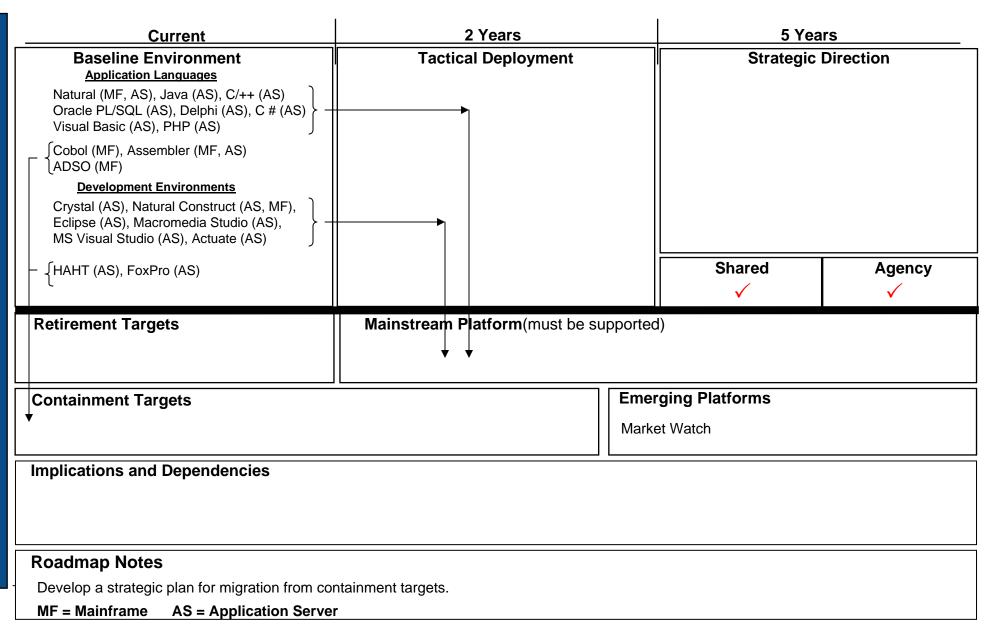
DOMAIN: COMPUTING SERVICES

DISCIPLINE: Application Languages & Development Environments

Discipline Roadmap for: Application Languages & Development Environments



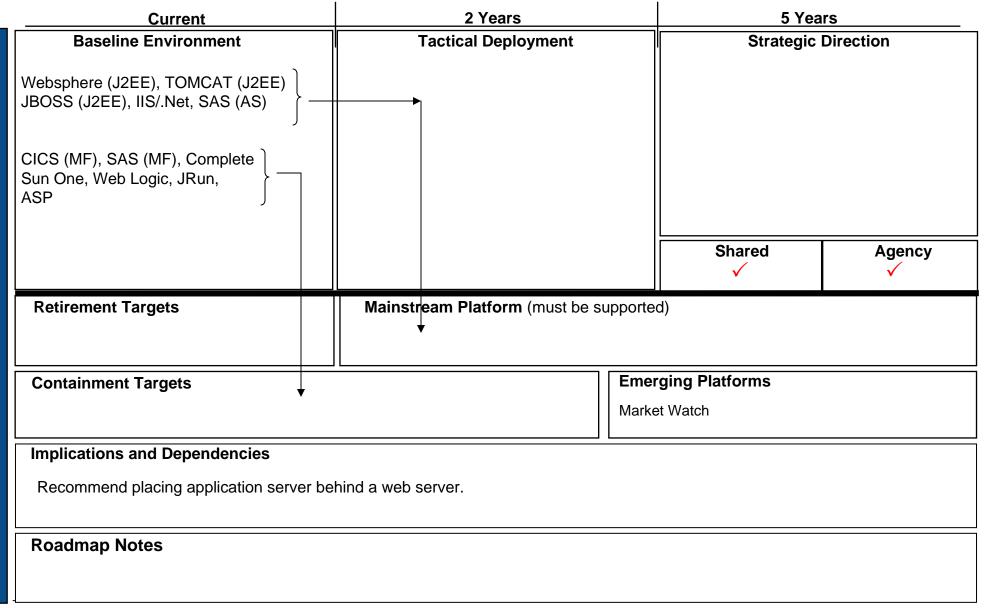
DISCIPLINE: Application Languages & Development Environments

Discipline Roadmap for: Application Languages & Development Environments

Discipline Boundaries:
□ The structure of this discipline is intended to serve as part of a Service Oriented Architecture approach.
Discipline Standards:
 Stay within supported software levels.
Migration Considerations:
 Business Case Analysis needed on an agency-by-agency basis when migrating.
Exception Considerations:
□ None.
Miscellaneous Notes:
□ None.
Established Date:
□ June 23, 2004
Date Last Updated:
□ June 28, 2006
Next Review Date:
□ June 2007

DISCIPLINE: Application Software Server Environments

Discipline Roadmap for: Application Software Server Environments



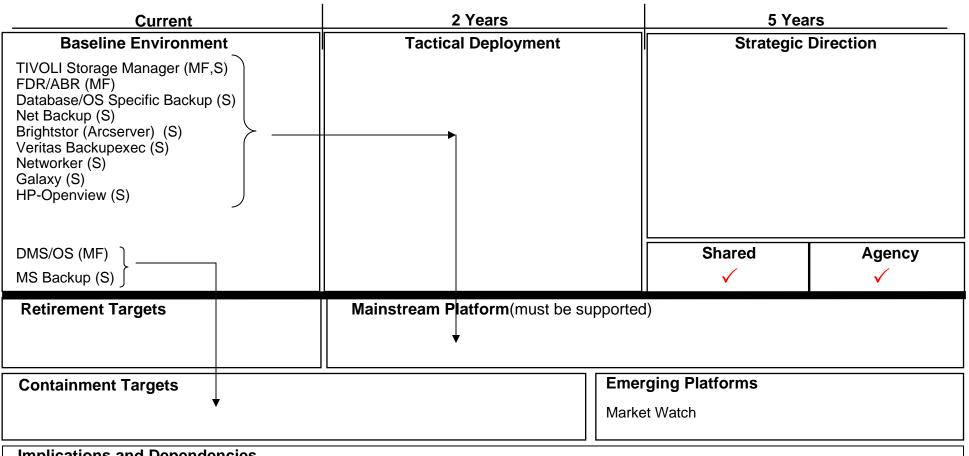
DISCIPLINE: Application Software Server Environments

Discipline Roadmap for: Application Software Server Environments

Discipline Boundaries:
□ The structure of this discipline is intended to serve as part of a Service Oriented Architecture approach
Discipline Standards:
 Stay within supported software levels.
Migration Considerations:
 Business Case Analysis needed on an agency-by-agency basis when migrating.
Exception Considerations:
□ None.
Miscellaneous Notes:
□ None.
Established Date:
□ June 2004
Date Last Updated:
□ June 28, 2006
Next Review Date:
□ June 2007

DISCIPLINE: Data Backup/Archival

Discipline Roadmap for: Data Backup/Archival



Implications and Dependencies

Pirmary hardware/software configuration must be available on all recovery systems at the same or higher releases.

Roadmap Notes

MF – Mainframe, S – Server. Develop a 5 year strategic plan, AOC Phase II.

DISCIPLINE: Data Backup/Archival

Discipline Roadmap for: Data Backup/Archival

Discipline Boundaries:
 Data Backup and archival software/methodology for mainframe and/or server platforms.
Discipline Standards:
Must meet average recovery time requirements as per agency Disaster Recovery Plan.
Migration Considerations:
How to handle older data backup/recovery media/software when converting to newer technology.
Exception Considerations:
□ None
Miscellaneous Notes:
None
Established Date:
□ February 2006
Date Last Updated:
□ June 28, 2006
Next Review Date:
□ June 2007

DISCIPLINE: Mainframe Hardware and OS

Discipline Roadmap for: Mainframe Hardware and OS

	Current	2 Years		5 Yea	rs
	Baseline Environment DEC Alpha 2100 4/200 OpenVMS DEC Alpha 4000 Open VMS 7.2-1 Unisys/ClearPath IBM Z800-Z0S	Tactical Deployment		Strategic	Direction
IG SERVICES		"Z" Series/ZOS		Shared	Agency
DOMAIN: COMPUTING	Retirement Targets	Mainstream Platforms (must be ZOS, "Z" Series	supporte	ed)	
ပိ	Containment Targets		Emer	ging Platforms	
DEC Alpha, Open VMS, Unisys/ClearPath IFL (L			Linux)		
Implications and Dependencies DEC Alpha needs to be retired. Need retirement plan and date. Open VMS needs to be				eplaced.	
	Roadmap Notes Need to form a work group to develop an Open VMS/Unisys/DEC migration strategy.				

DISCIPLINE: Mainframe Hardware and OS (Cont'd)

Discipline Roadmap for: Mainframe Hardware and OS

Discipline Boundaries:
□ None.
Discipline Standards:
□ None.
Migration Considerations:
 Open VMS-Need a migration strategy for each application. Planning should begin now.
The transition from OS/390 will be completed by 12/2005.
Exception Considerations:
□ None.
Miscellaneous Notes:
Linux on the IFL needs to be evaluated.
Established Date:
□ October 7, 2003
Date Last Updated:
□ June 28, 2006
Next Review Date:
□ June 2007

DOMAIN: COMPUTING SERVICES

DISCIPLINE: Mainframe & Mid-Tier Databases

Discipline Roadmap for: Mainframe(MF) & Mid-Tier(MT) Databases

Current	2 Years	5 Yea	ırs				
Baseline Environment	Tactical Deployment	Strategic	Direction				
DB2 (MF & MT) Software AG ADABAS (MF & MT)		—					
AXP 64 bit dB (MF) Computer Associates IDMS dB (MF) DMS2-Unisys (MF)							
Oracle (MT) Microsoft SQL (MT) MySQL (MT)							
Sybase Informix (MT)		Shared ✓	Agency ✓				
Retirement Targets	Mainstream Platform(must be supported	d)					
•	DB2 (MF& MT), Software AG ADABAS (MF & MySQL (MT)	MT), ORACLE (MT), Mi	crosoft SQL (MT),				
Containment Targets	Emer	ging Platforms					
AXP 64 bit dB (MF), Computer Associates IDMS dB (MF), DMS2-Unisys (MF)							
Implications and Dependencies Any decision involving VAX/VMS must also take into account AXP 64 dB, and vice-versa.							
Similarly, any decision involving a Unisys platform must include a decision for the disposition of DMS2.							
Roadmap Notes			Roadmap Notes				

DISCIPLINE: Mainframe & Mid-Tier Databases (Cont'd)

Next Review Date:

□ June 2007

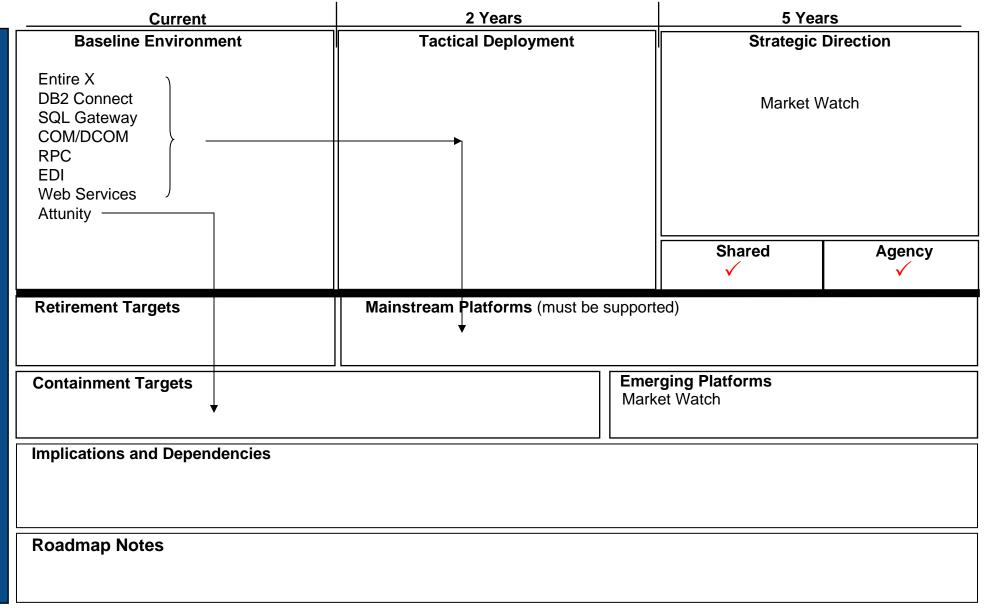
Discipline Roadmap for: Mainframe(MF) & Mid-Tier(MT) Databases

Discipline Boundaries:
□ The structure of this discipline is intended to serve as part of a Service Oriented Architecture approach
Discipline Standards:
□ None.
Migration Considerations:
□ None.
Exception Considerations:
□ None.
Miscellaneous Notes:
Need to research the prevalence/importance of Oracle in this context.
Established Date:
□ June 23, 2004
Date Last Updated:
□ June 28 2006

DOMAIN: COMPUTING SERVICES

DISCIPLINE: Mainframe & Server Middleware

Discipline Roadmap for: Mainframe & Server Middleware



DISCIPLINE: Mainframe & Server Middleware

Discipline Roadmap for: Mainframe & Server Middleware

- Discipline Boundaries:
- Discipline Standards:
 - □ Current within 1 release of mainstream software.
- Migration Considerations:
- Exception Considerations:
 - None.
- Miscellaneous Notes:
 - None.
- Established Date:
 - January 25, 2006
- Date Last Updated:
 - □ June 28, 2006
- Next Review Date:
 - □ June 2007

DOMAIN: COMPUTING SERVICES

DISCIPLINE: Service & Data Layer Servers - Hardware

Discipline Roadmap	: Service &	Data Layer	Servers - Hardware	
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Current	2 Years		5 Yea	rs
RISC INTEL Compatible			Strategic Market V AMI	Vatch
			Shared	Agency
			\checkmark	\checkmark
Retirement Targets	Mainstream Platforms (must be s	supporte	ed)	
	RISC, Intel Compatible			
Containment Targets En		Emer	ging Platforms	
Implications and Dependencies				
Roadmap Notes				

DISCIPLINE: Service & Data Layer Servers - Hardware Discipline Roadmap for: Service & Data Layer Servers - Hardware

- Discipline Boundaries:
 - Application and data services for small to mid-range servers not including mainframes.
- Discipline Standards:
 - None.
- Migration Considerations:
 - None.
- Exception Considerations:
 - None.
- Miscellaneous Notes:
 - None.
- Established Date:
 - November 2004
- Date Last Updated:
 - □ June 28, 2006
- Next Review Date:
 - □ June 2007

DISCIPLINE: Service & Data Layer Servers – OS

Discipline Roadmap for: Service & Data Layer Servers – OS

	Current	2 Years	5 Yea	ars
	Baseline Environment	Tactical Deployment	Strategic	Direction
SERVICES	Novell Unix Linux MS Windows IBM OS/400		Market	Watch
			Shared	Agency ✓
COMPUTING	Retirement Targets	Mainstream Platforms (must be supported Novell, Unix, Linux, MS Windows	orted)	
OMAIN: C	Containment Targets IBM OS/400		erging Platforms arket Watch	
0	Implications and Dependencies			

Roadmap Notes

Develop a configuration guide for Windows.

Need a plan to retire older versions, in the future, when support is discontinued. Financial impact should be considered on an agency by agency basis.

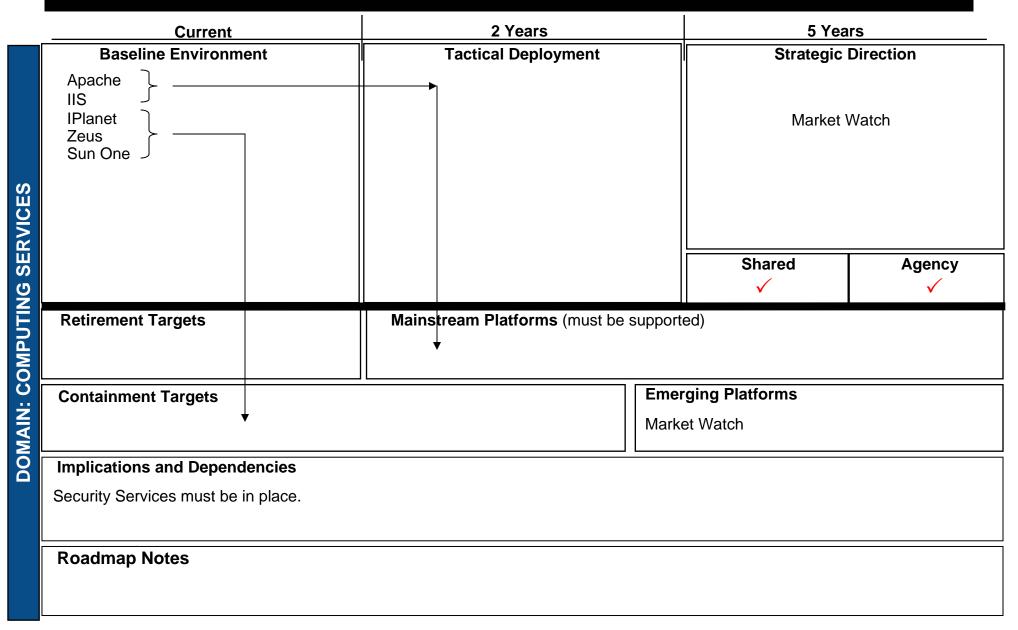
DISCIPLINE: Service & Data Layer Servers – OS

Discipline Roadmap for: Service & Data Layer Servers – OS

- Discipline Boundaries:
 - Application and data services for small to mid-range servers not including mainframes.
- Discipline Standards:
 - No more than 1 release behind current standard releases.
- Migration Considerations:
 - MS Windows 2000 migration strategy needed
- Exception Considerations:
 - None.
- Miscellaneous Notes:
 - None.
- Established Date:
 - November 2004
- Date Last Updated:
 - □ June 28, 2006
- Next Review Date:
 - □ June 2007

DISCIPLINE: WEB SERVER SOFTWARE

Discipline Roadmap for: Web Server Software



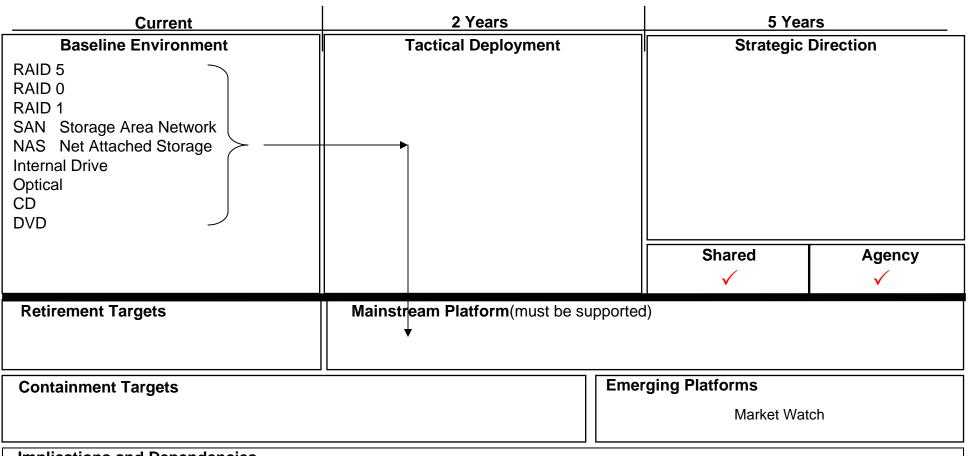
DISCIPLINE: Web Server Software

Discipline Roadmap for: Web Server Software

- Discipline Boundaries:
 - Intranet and Internet Servers
- Discipline Standards:
 - Stay within supported software levels
- Migration Considerations:
 - □ Migrate when usage of product becomes less than 1% of market share
- Exception Considerations:
 - None.
- Miscellaneous Notes:
 - None.
- Established Date:
 - January 25, 2006
- Date Last Updated:
 - □ June 28, 2006
- Next Review Date:
 - □ June 2007

DISCIPLINE: Storage Subsystem - Disk

Discipline Roadmap for: Storage Subsystem - Disk



Implications and Dependencies

Long range Strategic Direction should include RAID 5 and SAN. Caution should be used when utilizing RAID 0 due to the potential for full volume loss.

Roadmap Notes

Develop guidelines and usage strategy for each technology.

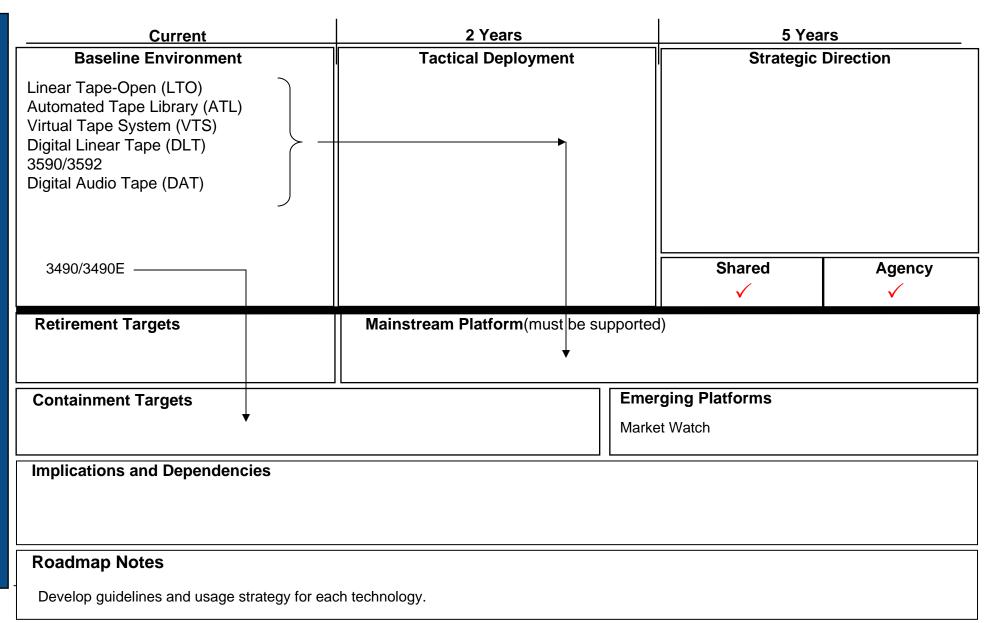
DISCIPLINE: Storage Subsystem - Disk

Discipline Roadmap for: Storage Subsystem - Disk

- Discipline Boundaries:
 - □ Disk storage for mainframe and/or server platforms.
- Discipline Standards:
 - None
- Migration Considerations:
 - □ Evaluate storage capacity and future growth for migration strategies.
- Exception Considerations:
 - None
- Miscellaneous Notes:
 - None
- Established Date:
 - □ February 2006
- Date Last Updated:
 - □ June 28, 2006
- Next Review Date:
 - □ June 2007

DISCIPLINE: Storage Subsystem - Tape

Discipline Roadmap for: Storage Subsystem - Tape



DISCIPLINE: Storage Subsystem - Tape

Discipline Roadmap for: Storage Subsystem - Tape

Discipline Boundaries:
Tape storage for mainframe and/or server platforms.
Discipline Standards:
□ None
Migration Considerations:
 Evaluate storage capacity and future growth for migration strategies.
Exception Considerations:
□ None
Miscellaneous Notes:
□ None
Established Date:
□ February, 2006
Date Last Updated:
□ June 28, 2006
Next Review Date:
□ June 2007